

Ponds, Power and Institutions

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Ponds, power and institutions: the everyday governance of accessing urban water bodies in a small Bengali town

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Abstract

While the growing field of urban political ecology has given significant attention to the fragmented hydroscape that characterizes access to drinking water in the global South, so far the (re)production of other urban waters and its related power relations have been underexplored. This paper seeks to contribute to filling this gap by exploring the everyday negotiations over access to urban water bodies, in particular ponds. These are understood as a composite resource that is at the same time water, land and public space. This analysis draws upon a case study from a small city in West Bengal, India, and primarily upon data from open interviews with different actors having a stake in urban ponds. The paper demonstrates that in a context of ambiguity of the statutory governance regime and fragmented control the (re)production of the pondscape is embedded within complex relationships of power where social marginalisation can be offset at least momentarily by local institutions such as neighbourhood clubs and political parties.

Key Words: urban water bodies, urban political ecology, everyday governance, India

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A Introduction

Ponds, known as *pukur* in Bengali, dot the landscape of cities in the southern portion of West Bengal. These water bodies are primarily artificial and serve a wide variety of economic and social purposes. Amongst the middle classes, ponds are primarily utilized for cultural and religious practices[1], and often also as a supplemental livelihood resource for small-scale urban aquaculture. For the poor however, they serve a much greater role. In addition to the already mentioned uses, those who do not have access to in-home piped water rely on ponds for: domestic purposes (such as washing of clothes and utensils); bathing; the care and maintenance of animals[2]; completion of livelihood tasks (such as washing cars or providing paid laundry services); fishing (angling) and collecting edible water plants to supplement diets. Thus, they are used for most water needs; except drinking water, which most residents collect from standpipes, wells or tankers. Furthermore, the banks of, or *ghats* (steps) on a local pond may serve as social meeting space, particularly for women and children (for their role in livelihoods see: Gordon et al. ,2000, Gregory and Mattingly , 2009).

The diverse uses of these urban water bodies as more than just a source of water leads us to conceptualize ponds as a composite resource. Within urban West Bengal, ponds are more than 'bodies' or 'containers' of an eco-system for aquaculture; they are also a source of water, urban land and public space. These characteristics are threatened as increasing urbanisation results in significant incentive to fill or alter these ponds in order to use them as urban real estate. Shortages of land and settlement density, amongst other factors also create incentive to use ponds as a place for garbage disposal, often with little regard for the ecological ill-effects. As water bodies, they are a component within livelihood strategies. As a source of water they supplement the piped-water system for a significant portion of the population, and form part of the complex, intersecting hydroscaapes that characterize cities of the global south (Bakker, 2003). The edge of the pond moreover serves as social space. In order to capture the composite nature of this resource as both a site of social relations and a biophysical resource herein we refer to the urban pondscape.

This paper investigates the urban pondscape in the small city of Bardhaman, West Bengal, as a site of power and as part of an urban socio-nature.[3] As a resource and space, ponds are subject to complex arrangements of everyday governance that are shaped by, and embedded within, complex webs of power that, in turn, shape the ponds themselves. We seek to develop a situated approach to urban political ecology by focussing on questions of everyday access as an entry point for understanding the processes and geometries of power (Swyngedouw, 2009:57) that (re)produce the pondscape. In particular, the paper explores how the pondscape operates as a resource and space in everyday life for the urban populace differentiated by caste, class, gender and other factors. Taking the view

that “ability is akin to power”(Ribot and Peluso, 2003:155) it examines who has the ability to access the pondscape, how, where and under what conditions.

A Toward a situated Urban Political Ecology of pondscales

In order to develop an understanding of pondscales, this article integrates insights from Urban Political Ecology (UPE) with the emerging literature on urban water bodies and rivers in India to develop a situated urban political ecology of complex waterscales. UPE as an approach seeks to explore the economic, political and social processes that continually reshape urban socio-natures in often uneven and unequal ways (see Heynen 2014 and Zimmer 2010 for overviews). The UPE literature on water is extensive and reflects the early and thorough engagement with this resource domain. Of particular interest here is the work by a set of authors, conducting research in primarily Southern cities through a UPE lens or engaging in similar questions. Their work has explored the fractured nature of (drinking) water provision in Southern cities and the ways that this reflects current and historic power-differentials amongst the local populations (Swyngedouw, 1997, Bakker, 2003, Gandy, 2004, 2008, Loftus and Lumsden, 2008, Anand, 2011, Ioris, 2012, Ranganathan, 2014b.). Bakker (2003a:337) employs the metaphor of “archipelagos” to capture the “complex layering of use-values and modes of production” that characterize hydroscales in the global South. This body of work has also usefully highlighted that the fragmented nature of the hydroscale (and its infrastructure) in post-colonial cities may not be new but “rather a pervasive, persistent rationality of rule” (Kooy and Bakker, 2008:1846); onto which current politics are inscribed in ways that may increase their inequitable and uneven nature (Gandy, 2008). These scholars have also demonstrated how exploring the multiplicity of water provisions and everyday practices can bring to fore broader and more complex questions about power, and the (re)production of urban socio-natures For example Ranganathan (2014a) explores the practices of water “mafias” in Bangalore and in doing so raises challenging questions about the role of public authorities and the reproduction of the post-colonial state. In doing so this work offers a complex understandings of the politics of the production of socio-natures in post-colonial cities.

These studies offer valuable insights into the ways that both historical power imbalances and current (neo-liberal) processes reproduce highly uneven cities. However, until now the majority of studies have focussed on circulated, and/or commoditized drinking water (for exceptions see: Finewood, 2012, Champion and Owusu-Boateng, 2013, Ernstson, 2014, Mee et al, 2014). Yet, as highlighted by Truelove (2011: 145) the focus on the politics of control within city-wide structures may “sideline additional dimensions, scales and spaces of water-related inequality”. To our knowledge the role of urban pondscape as unique part of the fractured hydroscale in the global south has not yet received attention. This paper argues that there is a need to explore the micropolitics of accessing urban

ponds as a composite resource in order to more thoroughly interrogate the way that power shapes urban socio-natures.

Engaging with the emerging literature on urban water bodies and rivers in India highlights the composite nature of these resources beyond that of just water. It does this by exploring the changing use value and accessibility of these spaces in the face of a multitude of factors such as: urbanisation, the imposition of middle-class aesthetics and use values, and/or notions connected to re-imagining cities as 'world class' (Arabindoo, 2011, Baviskar, 2011, D'Souza and Nagendra, 2011, Sundaresan, 2011, Diwadkar, 2013, Follmann, 2015). In Bangalore, for example, D'Souza & Nagendra (2011:841) examine the manner in which Agara Lake has been transformed from "a common ecological resource, to a recreational space". In the process traditional users of the water body have been alienated from using it for livelihood, domestic, and non-elite social uses. Similarly, a number of authors have examined the development of waterfronts, highlighting how these waterscapes have been transformed from commons to exclusionary spaces (Arabindoo, 2011, Baviskar, 2011, Mathur, 2012). This literature points to the complex processes that extend beyond political economic realms to encompass shifting social imaginaries that contribute to the transformation of urban waterscape.

Herein, we focus on the urban pondscape as part of a complex, fragmented urban hydroscape and an important resource bundle for particular groups of urban society. We recognize that cities of the global south (though not only those cities) are especially marked by the "parallel existence of different cityscapes ... a plurality of Urban Political Ecologies" (Zimmer, 2010:350). In order to engage with this pluralism, in this paper we focus not on the historical-material nature of the pondscape as part of the broader uneven hydroscape, but rather on the way various ponds are governed in very different ways (see also Monstadt, 2009, Gabriel, 2014). Our case study offers insights especially into the hydroscape of a small Indian city, which permits it to complement and enrich empirical evidence from the much more frequently researched large metropolises. Taking Lawhon et al.'s (2014) call to take the everyday dimension of UPE more seriously as a starting point, and integrating Zimmer's (2010) suggestion to build a more actor-oriented UPE, we seek to develop an approach informed by an actor-oriented analysis of 'everyday governance'. Here everyday governance is understood to be "the *actual practices* of how interests are pursued and countered, authority exercised and challenged and power institutionalised and undermined" (Le Meur and Lund, 2001:2). We argue that a focus on the everyday governance practices of state and non-state actors allows for a nuanced analysis of how socio-natural relationships shape the everyday micro-politics of the (re)production of the urban environment (Loftus, 2007, Zimmer, 2010, Truelove, 2011).

In order to conceptualize and operationalize questions of power and practices that shape access to the pondscape for our field study, we utilize the Theory of Access as offered by Ribot and Peluso (2003). This theory was developed in order to facilitate the grounded analysis of the dynamic processes and relationships that facilitate or impede access to

natural resources. It examines and maps the various continued social actions, referred to as “mechanisms”, by which individuals and institutions are able to gain, control and maintain access to a particular resource. It is through these mechanisms that those who *control* access are also able to mediate the access of others, who in turn gain or *maintain* their access by expending resources and/or powers. These processes are inherently dynamic and fragmented. However, focussing on demonstrated ability to access a resource, rather than rights, orients analysis towards questions of power that are “embodied in and exercised through” these mechanisms of access (Ribot and Peluso, 2003:154). Heuristically, the authors suggest that one can examine these varied mechanisms as strands within a “web of access”. This web of access is shaped by the bundles of power (material, cultural and political power) possessed by the individual actors within a particular access relationship. It turn, these access relationships are understood to be dynamic and shaped by the particular political-economic circumstances. However, Ribot and Peluso (2003:159) forward that: “Because of the fragmented nature of control and maintenance and the webs and bundles of powers that constitute them, people cannot be divided neatly into classes, as in a traditional Marxist frame.”

To operationalize their theory, Ribot and Peluso (2003) suggest two non-exhaustive subcategories of access mechanisms: (1) rights-based mechanisms and (2) structural and relational access mechanisms. Rights-based access is understood as the control of access through a direct claim on a resource wherein the claim is enforced through the community, state or government. This may result from law-based recognition of a claim or from custom or convention. Mediating and operating in parallel to rights-based mechanisms of access are an array of structural and relational mechanisms that shape “how benefits are gained, controlled, and maintained” (Ribot and Peluso, 2003:162). These mechanisms operate within the “constraints established by particular political-economic and cultural frames” (Ribot and Peluso, 2003:164). The non-exhaustive list of structural and relational mechanisms of access proposed by the Ribot and Peluso (2003) includes access to: technology; capital; markets; labour and labour opportunities; knowledge; and authority. Further, access through: social identity and the negotiation of other social relations are also considered within this subcategory of structural and relational access mechanisms. These mechanisms of access of mobilized within access relationships in order to gain, control or maintain access to resources that are the subject of right-based mechanisms. For example they may be mobilized by those with ‘rights’ to a resource in order to maintain their access, while those who wish to access the same resource may mobilize other mechanisms in order to establish a relationship of access to a resource that they have no formal claim over. Identifying and mapping such mechanisms as part of on-going negotiation for access occurring within the everyday is the core task of access analysis.

Within this paper with we adopt a broadly Foucauldian understanding of power as diffuse and relation. Following Foucault (1982:788) we understand that “power exists only when it is put into action”. Thus power is understood to be emergent from and not attached to

people (Ribot and Peluso, 2003:156). Adopting such a understanding of power displaces the State from the centre of analysis and instead relies on exploring the “dispersed practices and knowledges that constitute everyday forms of rule” (Ekers and Loftus, 2008:703) see also (Kooy and Bakker, 2008, Rattu and Véron, in press,).

A Urban ponds in West Bengal

Bardhaman is a small city located approximately 100 km north-west of Kolkata, with a population of about 350,000 people. The hydroscape of the city is fragmented. A colonial era waterworks that supplied filtered, piped water to the old part of the city is no longer operational. Thus, for drinking water residents rely on municipal deep tube wells, as well as shallow, private wells. Seventy percent of respondent households in our survey reported getting their water from community standpipes, while only 14 % had in home water. There are 74 primarily artificial water bodies (Burdwan Municipality, 2008:6); 89% of the population surveyed live near a pond and 53% use a pond for some purpose. Three of these ponds are profiled in order to explore the diversity of everyday governance of Bardhaman’s pondscape. The multiplicity of mechanisms through which actors access and control this composite urban resource, highlights the complex, overlapping, interrelated, and at times contradictory, power relations that shape the urban environment.

B Regulatory landscape

Both publically and privately owned water bodies are covered by the *West Bengal Inland Fisheries Act of 1982, amended in 1993*. Amongst other provisions, this act prohibits the pollution of any water area with industrial waste, sewage or other contaminating substances (II:6) and bans the filling or division of any water body exceeding as little as 350 square metres and retaining water for more than six months a year (IIIA:17a). The latter provision in particular seems open to interpretation, as many ponds are artificial and recharged yearly by monsoon rains. Thus, following a bad monsoon the lack of water can be mobilized in order to justify the filling of the pond.

While it is generally accepted that water bodies are both encroached upon and often filled-in (to reclaim the land), a local official at the West Bengal Department of Fisheries claimed that no complaints were brought to them in recent years. However, he reported that due to the urbanisation processes and the desire to “reclaim” valuable land, there is often significant political pressure and at times even threats made against staff of the

department to turn a blind eye and allow illegal filling to occur. The ambiguity that surrounds the responsibility for these water bodies and the interpretability and adaptability of the rules opens up spaces for people or groups to claim access to these ponds as urban land.

Ponds on municipally owned land come under the purview of the Municipality, which has the right to lease water access rights. Yet, municipal officials disagree amongst themselves about how such administrative authority is devolved. Moreover, officials from the municipality and from the State Department of Fisheries see their responsibility to be solely in terms of responding to complaints of pond filling.

Of the 74 water bodies within the municipality it is unclear how many are publically owned. In spite of following numerous avenues of inquiry, a consolidated list of publically owned water bodies (or plots registered as water bodies in the lands records) could not be obtained. Approximately 5,346 plots are recorded as water bodies (whether they still contain water in reality or have been filled) within the 22 *mouzas*[4] that are wholly or partially within municipal boundaries.

The lack of accurate maps or consolidated current data about landforms and ownership structures is not uncommon in India. Roy (2002) has pointed out there is a politics of mapping, power can be exercised in unique ways within the ambiguity of unmapped space. These ambiguities and the attendant opacity of both political and bureaucratic knowledge about land feed into a particular regulatory logic, wherein rules and responsibilities are fundamentally negotiable. The lack of clarity in the sphere of regulatory governance is mirrored in the complexity of the patterns of everyday governance which shape control over and access to these ponds, as is detailed within the following case studies.

B The pond that is not seen

In the east of the city, in a middle to upper-middle class neighbourhood a small unnamed pond (approximately 600 m²)[5] sits beside a large plot of open ground. The pond is separated from a much larger pond by a small strip of earth, which has been artificially widened by the homeowners who live on one side of it in order to allow access to their homes from both the street side and the side of the open ground. However, a screened pipe has been buried to allow water to circulate between the ponds while preventing fish from moving between the two. As is common, the pond has been encroached upon on two sides: residents, identified by local respondents as “refugees”[6], have used sand bags and other materials to extend a narrow strip of land between the pond and the road to build their shops and small houses. While the pond is reportedly municipally owned, for a number of years the local *para*-based Tagore club has earned a nominal amount by “leasing” it to a local person to engage in small-scale aquaculture. What is notable about this arrangement is not that the pond is leased –such leases are common – but rather that an institution that has no formal property rights over it leases it to a third party. When

asked about how the club manages to do this, respondents indicated that while it is a municipal pond, the city “does not see it”. As such, the club is able to control by whom and how the pond as water body is accessed. However, doing so does not prevent the “refugees” from employing other mechanisms to access the pondscape as urban land.

The club clearly benefits from the municipality’s tenuous control over this pond. The club has negotiated control over the resource by capitalising on the ambiguity of bureaucratic knowledge, thus employing structural/relational mechanisms of knowledge to mediate (and in practice negate) the legal access mechanism of property rights, as held by the municipality. It is unknown if the municipality ‘seeing’ this pond, would change anything.[7]

The social identity of the encroachers as refugees represents another relational mechanism is employed to control access to the resource (land). Within urban West Bengal, particularly in Kolkata, the refugee vote is broadly regarded as a key source of power for the left leaning parties, particularly the Communist Party of India (Marxist) (CPI-M), who incidentally also controlled the municipality of Bardhaman until September of 2013 (Chatterjee, 1997, Roy and Banerjee, 2006). Thus, while their ability to access the pond edge and transform it into land relies on the ambiguity of bureaucratic knowledge, there would be (or at least there was) political disincentive to displacing this particular group of actors or stopping them from building up the pond edge.

As an “unseen” resource this pond was open for anyone to claim. Access analysis brings to the fore questions of how the club was particularly well placed to claim control of this pond and in turn what mechanisms are mobilized to control and maintain the flow of benefits from this composite resource. In order to explain this the inter-relationship between *para* clubs and the *para* itself need to be explored. While *para* is often translated as ‘neighbourhood’, this translation is imperfect. In West Bengal, the *para* refers to a more complex spatialized expression of moral communities, wherein the residents (may) share particular caste, class, religion, language or place of origin affiliations (Chatterjee, 2004). At its essence, the *para* is a particular place or locale: “a bounded region which concentrates action and brings together in social life the unique and particular as well as the general and nomothetic” (Soja, 1989:148). It is thus a socio-spatial entity. Traditionally the *para* has been a social structure to which residents were loyal, a sentiment summed up by one respondent who explained to me that in West Bengal it is family and *para* first.

In turn *para* based clubs are a common form of organized civil society in both middle class and poor areas alike. Their membership is dominantly male and largely restricted to those who live in the *para* or are otherwise affiliated with it. The ubiquity of club membership among local men varies by *para*, but in general poor *para*’s have a greater proportion of households as members (often near ubiquitous). Clubs are heavily involved in the social life of a *para*. The club’s ability to exert authority is clearly demonstrated in

the manner in which inter- and intra-familial disputes, as well as some disputes with representatives of the state, are brought to the club board to be solved. Similarly, the clubs often play a role in mediating the morality of neighbourhood residents, for example by ensuring that local girls are not too friendly with boys from outside the *para* (see for example Chatterjee, 2004). Such social practices and cognitive frames of morality, authority and identity serve to embed local residents (including the refugees who ‘encroach’ the pond) within a social space as members of the *para* and in turn to be subject to the unwritten rules, norms and obligations that are inherent with that status—that is to say, they are institutionally embedded (Etzold et al., 2012). In contrast to the club profiled by Roy (2002) in Kolkata, clubs in Bardhaman largely self-identified as non-political and not party affiliated.

While (re-)producing the sociality of the locality, clubs as institutions also act to produce and reproduce the materiality of the *para*. This material nature is not the end result of the production of locality, rather it is a continual processes through which locality is produced and maintained (Appadurai, 1995). Thus the (re)production of the socio-nature of the *para* can in part be understood to be a component of the spatial practice of the clubs as institutions in place making. It is through their positionality that clubs, as embedded institutions that (re)produce the *para*, are uniquely situated to claim the materiality of their territory—in this case, through the control of the pond. Through the control and assertion of territoriality as a practice of (re)producing the *para*, the club itself is reproduced and legitimated as a powerful institution with authority over the *para*. In the production of the *para* as, amongst other things, a particular socio-nature, clubs must be understood as actors within the production of the situated political ecologies of Bardhaman.

Interpreted through Ribot and Peluso’s (2003) framework, the club mobilizes various structural and relational mechanisms of access in order to gain, control and maintain the flow of benefits from this pond. Knowledge of structural opacity is employed to claim authority over an “unseen” resource. Simultaneously, this process secured the social identity of the club as a legitimate actor and local authority, which were mobilized to derive benefit from this environmental resource. The composite nature of ponds as a resource is well highlighted through this case: the ability of the refugees to claim benefit from the pond as ‘urban land’ does not exclude the club from controlling access to the pond as a water body which can be leased for aqua-culture.

B Kaju Pukur – ponds as infrastructure and the spectre of trouble

In stark contrast to the unseen pond, the privately owned *Kaju Pukur* is seen and discursively claimed by the municipality as public ‘infrastructure’, while simultaneously a particular public who mobilizes an undefined but present threat of ‘trouble’ has claimed access to it in practice. *Kaju Pukur* is a medium sized pond (approximately 3900 m²) in the eastern part of Bardhaman. It is surrounded on all sides by roads faced with middle-

class houses. However, it is located within a ward with a large slum population, and at least three slum *paras* are located within 200 metres. One of the middle class buildings facing the pond houses the extended family of the pond's owner, who resides in Kolkata and is present in the area just once per week. He is highly educated, upper-middle class, and offers professional services out of a small courtyard office.

The surrounding slums have a limited number of community taps, through which water flows for only a few hours daily and in limited quantity, resulting in regular disputes over access practices. Thus, residents of all three nearby slums use the pond extensively for washing, bathing and religious purposes. During each site visit women were observed gathering along the pond's edge, chatting while they did their washing. Similarly, a group of men gathered on a makeshift covered platform at one end of the pond and children played in or at the edge of the pond. These observations speak to the nature of the pond as social space within the community. The conviviality observed during the day-to-day accessing of pond water contrasts with disputes that occur around the piped water infrastructure, which at times requires the intervention of senior local club members.

It is perhaps this shortage of piped water infrastructure that has led *Kaju Pukur* to be considered as slum infrastructure within the Municipality's previous Draft Development Plan (2008/09-2012/13). Within the aforementioned plan, Rs 9,57,200, (USD 15,380) was budgeted for improving the infrastructure in the slum, including development of the pond (Burdwan Municipality, 2008:17). Particularly compelling here is that private property was represented as urban infrastructure within policy discourse, thus making it a *de facto* public good and an acceptable target for public investment. While there are legal means for the state to appropriate private land in the name of the public good, via the process of 'vesting', there is no evidence to suggest that this was the intention for this property. However, there is a degree of ambiguity as to how this policy decision arose. When questioned, the municipal officer responsible for the preparation of the plan was unable to provide an explanation, eventually declaring that it was probably upon the suggestion of the prior councillor. Moreover, when discussing the history and nature of access relationships over the pond with its private owner, he did not mention any prior involvement with the municipality, again suggesting that it is unlikely that any known plan to vest the pond was in place. In any case, this point is somewhat moot, as public improvements of *Kaju Pukur* never occurred.

In the absence of any material intervention of the municipality, a local club[8] composed of all of the resident male heads of household (approximately 140) of one of the adjoining slum areas has stepped in to maintain this pond. Unlike the unclear relations between the municipality and the owner, clear rules of access govern this pond in the everyday. According to members of the All India club, the owner of *Kaju Pukur* leases them the pond in exchange for the cost of the taxes on the same. This arrangement has been in place since 2007; the club pays approximately Rs 4,000 (USD \$ 65) per year for the taxes and earns Rs 15,000 – 20,000 (USD \$245 – 325) from aquaculture. In September 2013, the club used

their own funds to hire daily labourers and a lorry to clear the overgrowth of water hyacinths. By doing so the quality of the water improved: as indicated by local residents, it is cleaner and the bad smell disappeared. Regular maintenance is performed by “voluntary” work crews, to which each household must contribute one day per year. Control by the club over the benefit from the fish in the pond seems to be uncontested; no one was seen angling for recreation during numerous site visits, nor were problems reported. This contrasts strongly with conflict surrounding control of access to *Jodha Pukur*, which is profiled later in this article.

In conversations with area residents, the pond owner is described a “good man” who would not sell the property (and thus threaten their access), and who allowed the club to lease the pond for the nominal cost of the taxes. This access relationship is discursively framed in terms of benevolent social relations: it is the innate quality of the owner as ‘good’ and acting in a moral way upon which the residents claim that they, as represented by the club, have gained and maintained differentiated access. However, the owner of *Kaju Pukur* characterizes this relationship quite differently. While he had previously leased the pond out at market rates, when the lessee decided to give up the lease, the club approached him and requested to take over the pond, offering to pay him the taxes only. He reports that while it was not advantageous for him economically, he accepted the offer because he is “not a political person” and the club may have “made trouble” for him otherwise. The respondent would not elaborate on the nature of this “trouble”, though it was clearly something he felt threatened by. He stated further though, that there are many “social problems” (again not elaborated) within this neighbourhood that could become a problem for him if he alienated the club, which he would do if he denied them the lease or involved the police or municipality. For these reasons the current access agreement was accepted. The pond owner of the pond has given up any attempt to control how his property is maintained, stating that he does not “concern himself” with what they do.

Access to *Kaju Pukur* is controlled through the intersection of two mechanisms: the spectre of “trouble” allowed the club to gain and control access to the pond while their positionality as an institution and source of authority maintains their unchallenged access to benefit from the fish. The club’s power here is first enacted discursively when they approach the pond owner and offer to pay him what they know to be below market rates. They do not approach the pond owner as (poor) men, but rather as a club – a socially powerful institution. Conversely, the pond owner’s fear of trouble and specifically social problems seems to speak to the manner in which the poor, their activities, and their homes are discursively framed as unscrupulous (Bhan, 2009) or menacing (Fernandes, 2004) within the Indian middle-class social imaginary.

At the same time, this arrangement still allows for broad access to the water by area residents (both club members and members of other clubs/*paras*). The practice and acceptance of non-*para* residents accessing the pond for domestic uses complicates but does not contradict the prior discussion of the source of club power. It does, however,

highlight that territorial delimitation is not absolute and that the rules in use are differentiated: actors are subject to different rules, governing different actions and resulting in different benefits. In this case, club members as a group benefit indirectly from the club's access to the fish in the pond, which are sold to generate funds for "social work" by the club. These are activities that benefit the *para* as a whole, but also serve to reproduce the role of the club within the *para*. However, club members as individuals are forbidden to access the fish as a resource. Similarly, residents of the club's *para* and of adjoining *paras* have equal ability to access the water in the pond for domestic uses. Yet, residents of other *paras* are excluded from accessing benefits from the aquaculture either directly or indirectly. Further, they do not use the pond's edge as a social space in practice (though they are not actively excluded from it); rather, most gather in spaces attached to their own clubs. Recognising how the rules in use differentiate space is important as it highlights the political nature of space. That is the way that places "reflect, disguise or reinforce relations of power and the politics of difference" (Donner and De Neve, 2006:10). The pond is both open to and closed from the broader public, with particular benefits flowing to particular groups. Moreover, the complexity and temporal nature of power is highlighted in this case.

Finally, the case of *Kaju Pukur* demonstrates quite well the manner in which access analysis highlights the fragmented nature of control. What would normally be considered sources of power, namely: economic wealth, education, high-class status and property, as held individually by the upper middle-class pond owner, are subjugated within this particular access relationship. The club is able to exercise power as an institution, in spite of individual members positions as minimally educated, poor members of the minority community. The complexities of power relations that can be mobilized to obtain or control access are highlighted in more detail in the final case study.

B Ponds and 'party boys' – Jhodha Pukur

Jhodha Pukur is a large pond (approximately 35,700 m²) owned by the Eastern Railway, a public enterprise. It is proximate to a small, long-established slum inhabited by people who work casually for the railways and elsewhere. For the last 15 to 20 years, the water body has been formally licensed to private actors for small-scale aquaculture.

The current licensee has held the license since early 2012. While the license is held in his name only, he fishes the pond in conjunction with an ad-hoc partnership of six other people. The terms of his license give him full legal right to control the use of the pond, its water, flora and fauna, so long as his activities do not contaminate the water and make it unfit for drinking. The railways also reserve the right remove or add water to the pond for any purpose.

However, the reality of access and control of this pond differs from the formal arrangements. In spite of the formal licensing of the pond, local people—in particular those who dwell in a proximate slum—have retained access to the waters for domestic purposes. The supply of piped water available to these residents is limited and as such, they rely on the water of the pond for most of their non-drinking needs. The licensee relates that he knows that slum residents depend on this water and as such, he cannot exclude them from accessing it. A relational mechanism of access is employed by the slum residents in order to facilitate this access arrangement: slum residents rely on their social identity as ‘poor’ within a social context that still largely demands benevolence on the part of the middle-class towards the basic needs of the poor (Etzold et al., 2012). Even if at the same time, the poor are often framed in negative terms, this moral obligation continues.

However, access by local ‘poor’ populations is not unconditional, the licensee asserts his legal right, enshrined through the rights-based mechanism of the license, to limit people from accessing the pond to fish. In practice, however, members of the public are challenging his attempt to enforce his legal rights. On our initial visit to the site, we encountered a number of young men angling in the pond. Upon questioning them, they claimed that they mostly angled for recreational purposes and not for livelihood. When questioned directly about their access relationships they asserted that “it is railways’ pond and it is open so ... there is no heavy pressure ...very little pressure from authorities” to ban fishing. They also did not believe that the pond was currently leased. They explained that it was for these reasons they were able to angle. In describing their activities to the researchers, the young men were discursively trying to maintain their access to the resource (in this case the fish) by employing rights-based mechanisms (as understood through Ribot and Peluso, 2003). They asserted that (a) the pond is belonging to the railways and is not leased (ergo a public resource to which they have a conventional claim), and (b) that their activity has not been opposed (at least in a “heavy” manner) thus implying the legitimacy of their actions.

The licensee, a middle-class man, relates a different access story. He states that he faces an on-going and significant problem with ‘boys’ who fish illegally. He estimates that 80 to 100 people angle in the pond each day. Due to their activities and the pollution caused by local residents throwing garbage in the pond, his profits have been reduced by over 60%. Yet he sees no real possibility of stopping this effectively, asking fatalistically “what can we do?” Still, he does make efforts to stop illegal fishing. To that end, he has employed guards who are supposed to catch people who fish and impose a fine on them. He is reluctant to involve the police, as he does not want “trouble”. This fear of trouble remains undefined, yet throughout our research, when people spoke about attempts to oppose certain groups, in particular groups of the poor (as discussed above), the concern of “trouble” is raised. According to him these ‘boys’ are mostly scheduled caste and scheduled tribe[9] people who were afraid of the prior ruling party (CPI-M) and are now able to take advantage of their affiliation with the current party in power (All India Trinamool Congress). In identifying these boys as scheduled caste and scheduled tribe

(poor) and affiliated to the party, the pond owner is both speaking to the previously discussed framing of the poor as dangerous but also a particular, situated dynamic *vis-à-vis* the party in West Bengal, discussed below. It is important to point out that the pond owner acknowledges that no senior member of the party encourages them to fish illegally, this impunity arises from their identity as party affiliates and so they act without fear.

In order to understand the source of this power, one must consider the nature of party politics in West Bengal and the manner in which this shapes everyday life. The influence of political parties in rural West Bengal is well explored in the literature (Webster, 1992, Williams, 2001, Corbridge et al., 2005, Chatterjee, 2009, Chakrabarty, 2011), which stands in stark contrast to the void of literature on urban West Bengal. While there are differences between rural and urban politics, we argue that, at least within this small city similarities in political life exist. Perhaps the most dominant commonality and yet source of distinction is the extent to which ‘the party’ permeates and politicizes everyday life in the studied urban centre (Bhattacharyya, 2009).[10] Referring to rural areas, Partha Chatterjee (2009:43) evocatively states: “In West Bengal, the key term is ‘party’. It is indeed the elementary institution of rural life in the state – not family ... but party. It is the institution that mediates every single sphere of social activity, with few exceptions, if any”. This statement speaks well to the discursive ubiquity of the idea of ‘the party’—rarely do respondents distinguish about which party they are speaking, rather it is referred to as an almost omnipresent force. ‘The party’ and its influence takes on connotations that extend beyond electoral politics, it acts both as a social institution as well as a political one (Bhattacharyya, 2009). However, within urban contexts there is a greater diversity of social institutions. It is insufficiently nuanced to equate the structure the party as a virtual puppet-master, as is perhaps suggested within Chatterjee’s (2009) evocative quote. As was demonstrated earlier in this paper other important institutions, in particular the *para* club also mediates the social sphere.

The competing attempts to gain and control benefit flows from this pond *vis-à-vis* legal fishing rights points to the complexity of everyday environmental governance. The licensee attempts to secure his access to the fish in the pond through various mechanisms. By employing guards he employs authority as relational mechanism to control access. By authorising the guards to fine people—a legalistic mechanism to which he has no statutory right—the discourse on the illegality of the young men’s actions is cemented through the practices of governance. A mechanism of control, generally reserved for the state, is mimicked and enacted by a private actor in attempt to use capital disincentives to control access. For their part, the illegal anglers more successfully mobilize relational mechanisms of access (i.e. identity and authority) in order to benefit from the fish in the pond. They do so in a way that is largely performed through their persistent use of the pond for angling in the face of the licensee’s attempts to stop it, rather than through discursive and reasoned negotiations for access. Their identity as party affiliates and their (assumed) access to political authorities allows them to violate the licensee’s legal right to control the benefit flow from this resource with impunity (Ribot and Peluso, 2003).

While these actors may or may not be officially connected to the party (i.e. they are very likely not formal card-holding party members), their status as informal party workers or party supporters gives them the upper hand in this relationship. Political identity as a relational mechanism of access is particularly complex as the actor may not need to actively or directly mobilize it in order to benefit from it. Within the enacted negotiations for access to the pond, the identity of the boys as party affiliates is a discursive form of power that exceeds their lack marginalized class/caste position within their relationship with the pond owner. While the licensee is a middle-class man who discursively distances himself from and disparages the offending persons through his identification of their caste status and assertions that they lack of family connections, these factors of social marginalisation do not offset the power which the illegal fisherman are able to mobilize through their relationship to the ruling party.

A Conclusion

Within this paper we have engaged in exploring how power shapes the (re)production of the urban pondscape in a small Bengali city. For some residents of Bardhaman, everyday life is subject to a highly uneven hydroscape, which necessitates the use of un-piped water that forms part of their hydro-social cycle. All three studied ponds are understood to be part of a power-infused landscape wherein the pondscape, as land resource, water body and public space, is at times subject to contentious access relationships when competing actors attempt to secure their claims over the resource. Exploring the ways that access to the pondscape is governed through the lens of UPE has allowed us to engage with the micro-politics of the (re)production of urban socio-natures.

What has been presented here is a UPE narrative that is not “straightforward, smooth and dichotomised”, but rather one that is situated, complex and dynamic (Zimmer, 2015:595). By exploring access relationships within the everyday, the complex mobilisations of power over and through the pondscape are exposed. Social and political identity, access to authority, knowledge, financial capital and gender, amongst other factors, shape the access relationships to the pondscape and in turn shape the pondscape itself. We have attempted to expose “the power geometries and the social actors carrying them that ultimately decide who will have access to or control over, and who will be excluded from access to or control over, resources or other components of the environment” (Swyngedouw, 2009:57). As a composite resource the pondscape is subject to a multitude of access relationships that overlap and operate in parallel, as well as to differentiated rules in use for each component of the composite. This sets the pondscape apart especially from piped water networks and enriches the understanding of hydroscares as spaces in which a multitude of claims operate in complex and dynamic ways.

Situating analysis in both the everyday and the actually existing cityscape has highlighted the multitude of contextually specific socio-natural relationships that produce particular urban political ecologies. The study of access to the pondscape has allowed us to expose

the complex (constitutive) power relationships of this small city. In particular, we have highlighted through the case of both the unnamed pond and *Kaju Pukur* how particular urban political ecologies are produced through the relationship between the club (a contextual, embedded institution) and the *para* (a socio-material entity and context). Similarly, embedded within this particular context is the power relationship among those with ties to the 'party' as an omnipresent social institution and those members of the public who lack these ties, as was demonstrated in the case *Jhodha Pukur*. Exploring these relationships and the sources of power that underpin them has highlighted the complexity and diffuse nature of power relations exerted over and through urban socio-environment.

The exploration of the pondscape has demonstrated how urban socio-natures can become sites through which particular forms of power connected to factors beyond capital and labour are enacted. Rather than rejecting issues of class it brings to the fore the need to engage with how socio-economic class intersects with other forms of power and other identities in the everyday processes that shape urban socio-natures. Moreover, it highlights that these identities are not fixed and singular, but rather they are multiple and flexible. As has been demonstrated in this paper people may mobilise particular identities (such as that of a club member or party affiliate rather than that of a poor person) in strategic ways in order to gain or control access to and use of particular socio-natures. Being cognisant of place and the situated nature of such identities allows for a more nuanced understanding of the pervasive nature of power and how it shapes the urban milieu.

Within this paper we have also attempted to bring into conversation two sets of literature, that of the UPE of the fractured hydroscape, and the emerging literature on urban water bodies in India. We suggest that there is significant scope for these two literatures to inform and enrich each other by refining the conception of the urban hydroscape offered by both. The literature on urban water bodies in India has engaged with both the politics and the local effects of big transformations in non-networked urban waters. In particular, authors have highlighted the multiple and overlapping claims on and overt conflicts over such waters in India's metropolises (e.g. Arabindoo 2011, D'Souza and Nagendra, 2011). As demonstrated within this paper the literature on such transformations can benefit from the engagement within UPE (e.g. Swyngedouw 1997, Truelove 2011) to the processes of power that (re)produce uneven hydro-social cycles in the absence of explicit conflicts. Yet, equally turning the UPE gaze to non-networked urban waters, such as the pondscape, can serve to broaden the engagement within UPE with a larger part of the fractured hydroscape that characterises many cities.

At the interface of these two literatures, this paper has engaged in the analysis of the everyday governance of current access relationships to urban ponds. We suggest that this engagement may also fruitfully be used to explore other dimensions of the urban pondscape. By exploring the contemporary history of urban ponds from a UPE perspective, for example, one might explore not only the physical and social space of the

pondscape, but equally the imagined and socially constructed space that it represents. Continued engagement with the the diversity of the material and imagined hydroscape will serve to further develop our understanding of the processes that shape contemporary urban socio-natures in parts of the global South.

- ANAND, N. 2011. Pressure: The PoliTechnics of Water Supply in Mumbai. *Cultural Anthropology*, 26, 542-564.
- APPADURAI, A. 1995. The Production of Locality. In: FARDON, R. (ed.) *Counterworks: Managing the diversity of knowledge*. London & New York: Routledge.
- ARABINDOO, P. 2011. 'City of sand': Stately Re-Imagination of Marina Beach in Chennai. *International Journal of Urban and Regional Research*, 35, 379-401.
- BAKKER, K. 2003. Archipelagos and networks: urbanization and water privatization in the South. *The Geographical Journal* 169, 328 - 341.
- BAVISKAR, A. 2011. What the Eye Does Not See: The Yamuna in the Imagination of Delhi. *Economic & Political Weekly*, 46.50, 45-53.
- BHAN, G. 2009. "This is no longer the city I once knew". Evictions, the urban poor and the right to the city in millennial Delhi. *Environment and Urbanization*, 21.1, 127-142.
- BHATTACHARYYA, D. 2009. Of Control and Factions: The Changing 'Party-Society' in Rural West Bengal. *Economic & Political Weekly*, 44.09, 59-69.
- BURDWAN MUNICIPALITY 2008. *Draft Development Plan Burdwan Municipality 2008/09 - 20012/13*, Burdwan, West Bengal, India, Burdwan Municipality.
- CAMPION, B. & OWUSU-BOATENG, G. 2013. The Political Ecology of Wetlands in Kumasi, Ghana. *International Journal of Environment and Bioenergy*, 7.2, 108-128.
- CHAKRABARTY, B. 2011. The Left Front's 2009 Lok Sabha Poll Debacle in West Bengal. *Asian Survey*, 51.2, 290-310.
- CHATTARAJ, S. 2003. *Eviction of Inclusion? The Politics of Resettlement in Calcutta's Squatter Settlements*. Unpublished thesis. Masters in City Planning. Department of Urban Studies and Planning. Massachusetts Institute of Technology.
- CHATTERJEE, P. 1997. *The Present History of West Bengal: Essays in Political Criticism*, Delhi, Oxford University Press.
- CHATTERJEE, P. 2004. *The Politics of the Governed: Reflections on Popular Politics in Most of the World*, New York, Columbia University Press.
- CHATTERJEE, P. 2009. The Coming Crisis in West Bengal. *Economic & Political Weekly*, 44.09, 42-45.
- CORBRIDGE, S., WILLIAMS, G., SRIVASTAVA, M. & VÉRON, R. 2005. *Seeing the State: Governance and Governmentality in India*, Cambridge, Cambridge University Press.
- D'SOUZA, R. & NAGENDRA, H. 2011. Changes in Public Commons as a Consequence of Urbanization: The Agara Lake in Bangalore, India. *Environmental Management*, 47.5, 840-850.

AUTHORS COPY

- DIWADKAR, V. 2013. Entrepreneurial Governance and the Ahmedabad Gujar Bazaar: Erasure of the Sabarmati River as Commons. *Revista Materia Arquitectura*, 07, 110 - 115.
- DONNER, H. 2013. West Bengal: Colonial legacy, class formation and politics. In: BERGER, P. & HEIDEMANN, F. (eds.) *The Modern Anthropology of India: Ethnography, themes and theory*. London and New York: Routledge.
- DONNER, H. & DE NEVE, G. 2006. Space, Place and Globalisation: Revisiting the urban neighbourhood in India. In: DONNER, H. & DE, N. (eds.) *The Meaning of the Local: Politics of Place in Urban India*. London & New York: Routledge.
- EKERS, M. & LOFTUS, A. 2008. The power of water: developing dialogues between Foucault and Gramsci. *Environment and Planning D: Society and Space*, 26.4, 698-718.
- ERNSTSON, H. 2014. The political nature of urban wetlands: speaking from Princess Vlei Wetland, Cape Town. *Urban Wetlands: South Asia*. May.2, 2-5
- ETZOLD, B., JÜLICH, S., KECK, M., SAKDAPOLRAK, P., SCHMITT, T. & ZIMMER, A. 2012. Doing institutions. A dialectic reading of institutions and social practices and its relevance for development geography. *Erdkunde*, 66.3, 185-195.
- FERNANDES, L. 2004. The Politics of Forgetting: Class Politics, State Power and the Restructuring of Urban Space in India. *Urban Studies*, 41.12 2415 - 2430.
- FINEWOOD, M. H. 2012. Feeling the squeeze: a political ecology of race and amenity-based development in coastal Bluffton, South Carolina. *Local Environment*, 17.9, 991-1011.
- FOLLMANN, A. 2015. Urban mega-projects for a 'world-class' riverfront - The interplay of informality, flexibility and exceptionality along the Yamuna in Delhi, India. *Habitat International*, 45.3, 213-222.
- FOUCAULT, M. 1982. The Subject and Power. *Critical Inquiry*, 8.4, 777 - 795.
- GABRIEL, N. 2014. Urban Political Ecology: Environmental Imaginary, Governance, and the Non-Human. *Geography Compass*, 8.1, 38-48.
- GANDY, M. 2004. Rethinking urban metabolism: water, space and the modern city. *City*, 8.3, 363-379.
- GANDY, M. 2008. Landscapes of disaster: water, modernity, and urban fragmentation in Mumbai. *Environment and Planning A*, 40.1, 108-130.
- GORDON, A., DAVIS, J., LONG, A. & MEADOWS, K. 2000. *The Role of natural resources in the livelihoods of the urban poor*, Greenwich, Natural Resources Institute, University of Greenwich.
- GOVERNMENT OF WEST BENGAL 1982, amended 1993. West Bengal Inland Fisheries Act. India.
- GREGORY, P. & MATTINGLY, M. 2009. Goodbye to natural resource-based livelihoods? Crossing the rural/urban divide. *Local Environment*, 14.9, 879-890.
- HEYDEN, N. 2014. Urban political ecology I: The urban century. *Progress in Human Geography*, 38.4, 598-604.
- IORIS, A. A. R. 2012. The persistent water problems of Lima, Peru: Neoliberalism, institutional failures and social inequalities. *Singapore Journal of Tropical Geography*, 33.3, 335-350.
- KOOY, M. & BAKKER, K. 2008. Splintered networks: The colonial and contemporary waters in Jakarta. *Geoforum*, 39.6, 1843-1858
- LAWHON, M., ERNSTSON, H. & SILVER, J. 2014. Provincializing Urban Political Ecology: Towards a Situated UPE Through African urbanism. *Antipode*, 46.2, 497-516.

AUTHORS COPY

- LE MEUR, P.-Y. & LUND, C. 2001. Everyday Governance of Land in Africa. *Bulletin de l'APAD [online]*, 22, np.
- LOFTUS, A. 2007. Working the Socio-Natural Relations of the Urban Waterscape in South Africa. *International Journal of Urban and Regional Research*, 31.1, 41-59.
- LOFTUS, A. & LUMSDEN, F. 2008. Reworking hegemony in the urban waterscape. *Transactions of the Institute of British Geographers*, 33.1, 109-126.
- MATHUR, N. 2012. On the Sabarmati Riverfront: Urban Planning as Totalitarian Governance in Ahmedabad. *Economic and Political Weekly*, 47.02, 64 -75.
- MEE, K. J., INSTONE, L., WILLIAMS, M., PALMER, J. & VAUGHAN, N. 2014. Renting Over Troubled Waters: An Urban Political Ecology of Rental Housing. *Geographical Research*, 52.4, 365-376.
- MONSTADT, J. 2009. Conceptualizing the political ecology of urban infrastructures: insights from technology and urban studies. *Environment and Planning A*, 41.8, 1924-1942.
- RANGANATHAN, M. 2014a. 'Mafias' in the Waterscape: Urban Informality and Everyday Public Authority in Bangalore. *Water Alternatives*, 7.1, 89 - 105.
- RANGANATHAN, M. 2014b. Paying for Pipes, Claiming Citizenship: Political Agency and Water Reforms at the Urban Periphery. *International Journal of Urban and Regional Research*, 38.2, 590-608.
- RATTU, P. & VÉRON, R. in press. Towards a Foucauldian Urban Political Ecology of water: Rethinking the hydro-social cycle and scholars' critical engagement. *Foucault Studies*.
- RIBOT, J. C. & PELUSO, N. L. 2003. A Theory of Access*. *Rural Sociology*, 68.2, 153-181.
- ROY, A. 2002. *City Requiem, Calcutta: Gender And The Politics Of Poverty*, University Of Minnesota Press.
- ROY, D. & BANERJEE, P. S. 2006. Left Front's Electoral Victory in West Bengal: An Ethnographer's Account. *Economic & Political Weekly*, 41 :40, 4251 - 4256.
- SOJA, E. 1989. *Post Modern Geographies: The Reassertion of Space in Critical Social Theory*, London, Verso.
- SUNDARESAN, J. 2011. Planning as Commoning: Transformation of a Bangalore Lake. *Economic & Political Weekly*, 40.40, 71-79.
- SWYNGEDOUW, E. 1997. Power, nature, and the city. The conquest of water and the political ecology of urbanization in Guayaquil Ecuador. *Environment and Planning A*, 29.2, 311 - 332.
- SWYNGEDOUW, E. 2009. The Political Economy and Political Ecology of the Hydro-Social Cycle. *Journal of Contemporary Water Research & Education*, 142, 55-60.
- TRUELOVE, Y. 2011. (Re-)Conceptualizing water inequality in Delhi, India through a feminist political ecology framework. *Geoforum*, 42.2, 143-152.
- WEBSTER, N. 1992. Panchayati Raj of West Bengal: Popular Participation for the People or the Party? *Development and Change*, 23.4, 129-163.
- WILLIAMS, G. 2001. Understanding 'political stability': Party action and political discourse in West Bengal. *Third World Quarterly*, 22.4, 603-622.
- ZIMMER, A. 2010. Urban Political Ecology. Theoretical concepts, challenges, and suggested future directions. *Erdkunde*, 64.4, 343-354.
- ZIMMER, A. 2015. Urban political ecology 'beyond the West': engaging with South Asian urban studies. In: BRYANT, R. L. (ed.) *International Handbook of Political Ecology*. Cheltenham, U.K. & Northampton, USA: Edward Elgar.

¹ Pond water is important for ceremonial bathing, both after attending cremations but prior to entering one's home and for ceremonially bathing brides prior to marriage.

² Very small scale urban animal husbandry is common amongst the poor. Most commonly households may keep one or two goats or ducks, much more rarely they may also have a cow or water buffalo.

³ Empirical data presented in this paper emerges from seven months of primary, qualitative fieldwork from August 2013 to February 2014 in Bardhaman, West Bengal. During this period approximately 35 open interviews, most of them conducted with the assistance of Bengali speaking research assistant(s), were concerned with urban water bodies. Respondents included a wide range of actors including elected officials, bureaucrats, landowners, members of local civil society, as well as pond users and other city dwellers. In keeping with the anonymity offered to participants, data from these interviews is not individually cited here and all names are pseudonyms. In addition data is drawn from a small household survey and from ethnographic observation conducted while the first author lived in Bardhaman, as well as the analysis of secondary data sources such as policy documents.

⁴ The administrative term mouza denotes a particular administrative district containing one or more settlements. Previously this term corresponded to revenue collection units.

⁵ Area of each pond profiled is approximate and provided for illustrative and comparative purposes only. They have been calculated using google earth images (dated 3/30/2014) due to the inability to access official records.

⁶ In West Bengal, the term 'refugees' is colloquially applied to Hindu Bengalis who have left what is now Bangladesh at various periods since the partition. However, respondents have told the author that current refugees are as likely to be economic migrants as people who feel persecuted for their minority beliefs. The Government of West Bengal only officially considers someone a refugee if they have migrated from the erstwhile East Pakistan (now Bangladesh) prior to the 1971 war. (Chattaraj 2003). Many areas that were locally identified as 'refugee' areas were well established and (lower) middle class, thus the term should not necessarily be equated with poor.

⁷ While analysis of this case would have benefited from discussing this particular pond with the municipality, doing so raised an ethical issue. The respondents agreed to speak with the researcher on the basis of their anonymity. Exposing this unseen resource to the municipality carried with it the inherent risk of enabling the municipality to alter the current access arrangement to the detriment of those involved. Acting from a perspective of doing no harm to respondents it was decided that the issue could not be raised with municipal officials.

⁸ While it is not always the case that all households are members of a *para* club, in this case all of the households in this *para* are members, except two or three households that are headed by women. This club does not allow outside members as they feel it may create problems.

⁹ Scheduled caste and scheduled tribe are administrative terms in India to refer to specific population groups marginalized within or who are outside of the Hindu caste hierarchy.

¹⁰ The literature on the role of the party is based upon research conducted during the CPI-M's 34 years of rule in West Bengal. However, similar dynamics continue under the All India Trinamool Congress (Donner, 2013).